Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A converter for converting an OTDM type optical signal into a WDM type optical signal, the WDM type optical signal being an optical signal comprising a plurality of wavelength-division multiplexed optical signals, each transmitted at an associated wavelength, characterized in that it comprises a plurality of devices connected in parallel for temporally subsampling the OTDM type optical signal at a predetermined subsampling frequency, each temporal subsampling device comprising:

a generator for generating clock pulses transmitted at the predetermined subsampling frequency and at a conversion wavelength specific to the subsampling device and corresponding to the wavelength associated with an optical signal among said plurality of wavelength-division multiplexed optical signals, and

a wavelength converter device adapted to receive at its input the OTDM type optical signal and the clock pulses at the conversion wavelength specific to the subsampling device in order to supply at its output a subsampled signal of the optical signal at the conversion wavelength, the converter device comprising:

a linear optical amplifier adapted to receive the OTDM type optical signal and the clock pulses propagating in the opposite direction, the maximum linear power of the amplifier being adjusted so that it can be less than the peak power of the OTDM type optical signal, and

a phase modulation to amplitude modulation converter.

2. (Previously Presented) A converter according to claim 1 for converting an OTDM type optical signal into a WDM type optical signal, wherein the phase modulation to

amplitude modulation converter comprises a delayed differential Mach-Zehnder interferometer.

3. (Previously Presented) A converter according to claim 1 for converting an OTDM type optical signal into a WDM type optical signal, comprising a circulator between the amplifier and the modulation converter in order to direct the OTDM optical signal to the amplifier and the output signal of the amplifier to the modulation converter.

4. (Currently Amended) A converter for converting a WDM type optical signal into an OTDM type optical signal, the WDM type optical signal ~~consisting of~~ comprising a plurality of wavelength-division multiplexed optical signals each transmitted at ~~a~~ an associated wavelength specific to it, characterized in that it comprises:

a generator for generating a continuous wave signal transmitted at a predetermined conversion wavelength, ~~and~~

a connection interface, and

a plurality of wavelength converter devices in parallel, each converter device being adapted to receive at its input the continuous wave signal and one of the wavelength-division multiplexed optical signals ~~in order to supply at~~ and to apply its output ~~an OTDM type optical signal transmitted at a temporal frequency that is a multiple of the common frequency of the wavelength-division multiplexed optical signals,~~ to the connection interface, each converter device comprising:

a linear optical amplifier adapted to receive the continuous wave optical signal and the wavelength-division multiplexed optical signal propagating in the opposite direction, the maximum linear power of the amplifier being adjusted so that it can be less than the peak power of the wavelength-division multiplexed optical signal, and

a phase modulation to amplitude modulation converter~~, and~~

~~a plurality of time shifter devices each associated with a specific converter device~~.

5. (Currently Amended) A converter according to claim 4 for converting a WDM type optical signal into a OTDM type optical signal, including ~~means for time shifting wavelength-division multiplexed~~ a plurality of time shifter devices each associated with a specific converter device such that optical signals applied by the corresponding converter devices are time shifted relative to each other ~~and a single converter device adapted to receive at its input the time-shifted wavelength-division multiplexed optical signals~~.

6. (Previously Presented) A converter according to claim 4 for converting a WDM type optical signal into a OTDM type optical signal, wherein the phase modulation to amplitude modulation converter comprises a delayed differential Mach-Zehnder interferometer.

7. (Previously Presented) A converter according to claim 4 for converting a WDM type optical signal into a OTDM type optical signal, including at least one circulator between each amplifier and each modulation converter in order to direct the wavelength-division multiplexed optical signals to the amplifier and the output signal of the amplifier to the modulated signal converter.

8. (Previously Presented) A converter according to claim 2 for converting an OTDM type optical signal into a WDM type optical signal, comprising a circulator between the amplifier and the modulation converter in order to direct the OTDM optical signal to the amplifier and the output signal of the amplifier to the modulation converter.

9. (Previously Presented) A converter according to claim 5 for converting a WDM type optical signal into a OTDM type optical signal, wherein the phase modulation to amplitude modulation converter comprises a delayed differential Mach-Zehnder interferometer.

10. (Previously Presented) A converter according to claim 5 for converting a WDM type optical signal into a OTDM type optical signal, including at least one circulator between each amplifier and each modulation converter in order to direct the wavelength-division multiplexed optical signals to the amplifier and the output signal of the amplifier to the modulated signal converter.

11. (Previously Presented) A converter according to claim 6 for converting a WDM type optical signal into a OTDM type optical signal, including at least one circulator between each amplifier and each modulation converter in order to direct the wavelength-division multiplexed optical signals to the amplifier and the output signal of the amplifier to the modulated signal converter.

12. (Previously Presented) A converter according to claim 9 for converting a WDM type optical signal into a OTDM type optical signal, including at least one circulator between each amplifier and each modulation converter in order to direct the wavelength-division multiplexed optical signals to the amplifier and the output signal of the amplifier to the modulated signal converter.

13. (New) A converter according to claim 1, wherein a pulse generator of the plurality of generators is offset relative to another generator of the plurality of generators by an amount of time corresponding to a frequency of the OTDM type optical signal.

14. (New) A converter according to claim 5, wherein each time shifter is interposed between the associated converter device and the connection interface.

15. (New) A converter according to claim 5, wherein two optical signals applied by converter devices are time shifted by an amount of time corresponding to a frequency of the OTDM type optical signal.

16. (New) A converter for converting a WDM type optical signal into an OTDM type optical signal, the WDM type optical signal comprising a plurality of wavelength-

division multiplexed optical signals each transmitted at an associated wavelength, characterized in that it comprises:

a generator for generating a continuous wave signal transmitted at predetermined conversion wavelength;

a wavelength converter device adapted to receive at its input the continuous wave signal and said plurality of optical signals in order to supply at its output the OTDM type optical signal, said converter device comprising:

a linear optical amplifier adapted to receive the continuous wave optical signal and the plurality of wavelength-division multiplexed optical signals propagating in the opposite direction, the maximum linear power of the amplifier being adjusted so that it can be less than the peak power of the wavelength-division multiplexed optical signals; and

a phase modulation to amplitude modulation converter.

17. (New) A converter according to claim 16, wherein each multiplexed optical signal of said plurality is applied to the converter device through a respective delay unit.

18. (New) A converter according to claim 17, wherein one of said delay units is shifted relative to another of said delay units by an amount of time corresponding to a frequency of the OTDM type optical signal.